

5(3)

SOV/79-29-8-33/81

AUTHORS:

Skvarchenko, V. R., Levina, R. Ya., Karpenko, N. F.

TITLE:

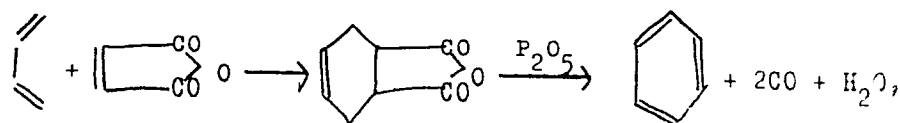
Aromatic Hydrocarbons. X. Synthesis of Polymethyl-diethyl Benzenes From Adducts of 3,4-Diethyl-hexadiene-2,4 With Maleic and Alkyl-maleic Anhydrides

PERIODICAL:

Zhurnal obshchey khimii, 1959, Vol 29, Nr 8, pp 2605 - 2609 (USSR)

ABSTRACT:

The aromatization of the tetrahydrophthalic anhydrides under the action of phosphorus pentoxide carried out previously according to the scheme



was used in the present paper for the synthesis of polymethyl-diethyl benzenes hitherto unknown (dimethyl-, trimethyl-, and tetramethyl-diethyl benzenes). The transformation of the adducts of tetraalkyl-butadiene (of 3,4-diethyl-hexadiene-2,4) with maleic, methyl- and dimethyl-maleic anhydride under the action

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Aromatic Hydrocarbons. X. Synthesis of Polymethyl-diethyl SOV/79-29-8-33/81
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Anhydrides

of P_2O_5 was investigated. The behavior of 3,4-diethyl-hexadiene-2,4 in the "diene synthesis" has so far not been investigated. It was carried out on heating in the autoclave at 120, 130, and 190°, respectively, within 10, 20, and 30 hours (yields 72.41 and 67%) (Scheme 2). From compound (I) compound (IV) was obtained by heating with P_2O_5 in a 71% yield (Scheme 3). By reaction of P_2O_5 with (II), (V) was formed (89%) (Scheme 4). The adduct of 3,4-diethyl-hexadiene-2,4 with dimethyl-maleic anhydride, compound (III), was more resistant to P_2O_5 . Compound (VI) could only be obtained by heating the reaction mass for 10 hours (Scheme 5) (77%). The synthesized hydrocarbons not yet described were closely characterized. The initial diene, the 3,4-diethyl-hexadiene-2,4, was obtained by dehydration of 3,4-dimethyl-hexanediol-3,4 with acetic anhydride in the presence of orthophosphoric acid (50-54%). There are 11 references, 6 of which are Soviet.

ASSOCIATION: Moskovskiy gosudarstvennyy universitet (Moscow State University)

SUBMITTED: July 4, 1958

Card 2/2

KELER, E.K.; KARPENKO, N.B.

Interaction of BaCO_3 with TiO_2 and ZrO_2 during heating. Zhur. neorg.
khim. 5 no.3:668-673 Mr '60. 2 (MIRA 14:6)

1. Institut khimii silikatov AN SSSR.
(Barium carbonate)
(Titanium)
(Zirconium oxide)

S/078/60/005/06/12/030
B004/B014

15.2210

AUTHORS: Karpenko, N. B., Keler, E. K.

TITLE: Interaction of BaCO_3 With TiO_2 and ZrO_2 on Heating

PERIODICAL: Zhurnal neorganicheskoy khimii, 1960, Vol. 5, No. 6, pp. 1267 - 1282

TEXT: By way of introduction, the authors discuss publications concerning the above subject, and mention P. Z. Tandura, T. N. Verbitskaya, T. N. Burakova, G. A. Smolenskiy, A. I. Avgustinik, and N. S. Anisimovich. Fig. 1 offers a comparison of the data supplied by P. Z. Tandura and T. N. Verbitskaya for the parameters of the unit cell of the solid $\text{BaTiO}_3\text{-BaZrO}_3$ solutions with the data obtained by the authors. The authors had already investigated the interaction of BaCO_3 with TiO_2 and ZrO_2 in an equivalent ratio of the components (Ref. 4), and had worked out a method for the quantitative determination of the various phases by X-ray, optical, and chemical analysis. The present paper deals with

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Interaction of BaCO_3 With TiO_2 and ZrO_2 on Heating

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B004/B014

the interaction at various ratios among the components (Fig. 2). The samples were continuously annealed up to $1,200^\circ\text{C}$, then constantly at $1,200$, $1,250$, $1,300$, $1,400$, $1,500$, and $1,600^\circ\text{C}$. Thermograms were taken by means of a device designed by E. K. Keler and A. K. Kuznetsov (Ref. 7), which permitted the simultaneous recording of the thermal differential curve, the curve of weight loss, and the curve of volume change. Fig. 3 shows such thermograms. For comparison, Fig. 4 illustrates the thermograms for TiO_2 , ZrO_2 , BaCO_3 , and the binary mixtures

$\text{BaCO}_3 + \text{TiO}_2$ and $\text{BaCO}_3 + \text{ZrO}_2$. The endothermic effect observed between $1,000$ and $1,100^\circ\text{C}$ was explained by a redistribution of BaO in the titanate and zirconate on the establishment of equilibrium in the solid solutions, which was confirmed by the thermogram (Fig. 5) of $\text{BaZrO}_3 + \text{TiO}_2$. Experimental data are given in Tables 1, 2. Figs. 6, 7 show the composition of the phases for different mixtures of $\text{BaTiO}_3 + \text{ZrO}_2$ and $\text{BaZrO}_3 + \text{TiO}_2$ at temperatures between $1,200$ and $1,600^\circ\text{C}$. The interaction between the oxides of the system $\text{BaO} - \text{TiO}_2 - \text{ZrO}_2$ proceeds in a

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different way, depending on temperature and composition of the mixture. The formation of the solid solution BaTiO_3 - BaZrO_3 , which takes place only above $1,200^\circ\text{C}$, is determinant for the subsequent processes. The components which do not enter the solid solution, form barium dititanates and barium trititanates below $1,300^\circ\text{C}$, barium tetratitanate at $1,300 - 1,400^\circ\text{C}$, and zirconium titanate above $1,400^\circ\text{C}$. If the mixture has a high TiO_2 content, a new compound is formed, which corresponds to one of the compounds $\text{Ba}_2\text{Ti}_{12}\text{O}_{12}$ or $\text{Ba}_2\text{Ti}_{19}\text{O}_{20}$ given by G. H. Jonker and W. Kwestroo (Ref. 5). The processes took place at different rates in the system investigated. Inhibited, retarded reactions occur for a part (formation of the solid solution below $1,200^\circ\text{C}$, formation of barium dititanate) which do not attain equilibrium with the usual technical burning times. Hence, the phase compositions found do not correspond to equilibrium states, but to stable, relatively invariant states. These phase diagrams can therefore be valuable in the field of electroceramics of barium titanate and other compounds. There are 7 figures, 2 tables, and 8 references: 7 Soviet and 1 American.

Card 3/4

Inst. of Silicate Chemistry, Acad Sci USSR

KARPENKO, N. B.

Dissertation defended for the degree of Candidate of Chemical Sciences at the Institute of Silicate Chemistry imeni I. V. Grebenshchikov in 1962:

"Study of Barium Carbonate Reactions with Dioxides of Titanium and Zirconium Upon Heating."

Vest. Akad. Nauk SSSR. No. 4, Moscow, 1963, pages 119-145

MARCHENKO, A.I., kand.med.nauk (Kiyev); KARPENKO, N.G. (Kiyev);
SHCHERBINA, A.S. (Kiyev)

Frequency of paradentosis among the rural population of Fastov
and Brovary Districts of Kiyev Province. Probl.stom. 4:201-204
'58. (MIRA 13:6)

(KIEV PROVINCE--GUMS--DISEASES)

KARPENKO, N. I., assistant

Reconstruction of the masticatory function in the orthopedic treatment of some forms of pathologic occlusion. Trudy KGMI no.2:196-206 '60. (MIRA 15:7)

1. Iz kafedry ortopedicheskoy stomatologii - zav. kafedroy dotsent M. A. Solomonov.

(MASTICATION) (DENTAL PROSTHESIS)

GAVRILOV, Ye.I., prof.; KARPENKO, N.I., assistant

Recording the chewing movements of the lower jaw (oscillography).
Stomatologiya 41 no.5:69-72 S-O '62. (MIRA 16:4)

1. Iz kafedry ortopedicheskoy stomatologii (zav. - prof. Ye.I.
Gavrilov) Kalininskogo meditsinskogo instituta.
(MASTICATION) (OSCILLOGRAPHY)

KOSYGIN, Yu.A.; GORLOV, S.I.; KARPENKO, N.M.

Tectonics of the western Ciscaucasian marginal depression. Izv.
AN SSSR. Ser.geol.20 no.4:92-101 J1-Ag'55. (MIRA 8:10)
(Caucasus, Northern--Geology, Structural)

KARPENKO, N.M.; MICHKASSKAYA, N.A.

Some results of regional generalization of electric logging data.
Geol. nefti i gaza 5 no.6:35-40 Je '61. (MIRA 14:6)

1. Upravleniye Krasnodarneft'.
(Electric prospecting)

KARPENKO, Nikolay Mitrofanovich *

DECEASED

KARPENKO, N.M.

Recovery factor based on depleted pools in eastern fields of
the Oil Field Administration of the Khadyzhensk Petroleum Trust.
Neft. khoz. 40 no.1:44-49 Ja '62. (MIRA 15:2)
(Krasnodar Territory--Oil fields--Production methods)

* obit - Neftegorodaya geologiya i geofizika Moscow
No. 11, 1964

KARPENKO, N. N.

10311

S/120/62/000/004/007/047
E039/E420

AUTHORS: Malyshev, I.F., Popkovich, A.V., Mikhel's, Ya.L.,
Martyugov, G.M., Artemov, A.D., Karpenko, N.M.

TITLE: The vacuum system of the 7 GeV proton synchrotron

PERIODICAL: Priroda i tekhnika eksperimenta, no.4, 1962, 46-51

TEXT: The vacuum chamber of the synchrotron consists of 112 curved sections in the magnet gaps and 112 straight sections situated between the magnet blocks. The curved sections (except for 11 sections containing accelerating electrodes, situated in X-blocks) are constructed from corrugated tubes of 1X18H9T (18H18N9T) steel; thickness 0.3 mm, convolutions 3 mm deep and a pitch of 7 mm and of elliptical cross-section 114 and 84 mm along axes. On the straight sections are mounted the vacuum manifolds and apparatus for observing the beam, e.g. measurement of intensity and position of beam and also lost particles. 56 Oil diffusion pumps type BA-05 (VA-05) with semiconductor refrigerators and liquid nitrogen traps are used to evacuate the working space and there are 14 forevacuum pumps type BH-1 (VN-1). The vacuum chamber can be divided into 14 sections by means of
Card 1/2

The vacuum system of ...

5/120/62/000/004/007/047
E039/E420

gate valves which can be operated manually or by remote control. A working pressure of about 2×10^{-6} mm is achieved. Detailed diagrams of the layout of the system and the main components are given. There are 7 figures.

ASSOCIATION: Nauchno-issledovatel'skiy institut elektrofizicheskoy apparatury GKAE (Scientific Research Institute for Electrophysical Apparatus GKAE)

SUBMITTED: April 6, 1962

Card 2/2

MALYSHEV, I.F.; POPKOVICH, A.V.; MIKHELIS, Ya.L.; MARTYUGOV, G.M.;
ARTEMOV, A.D.; KARPENKO, N.M.

Vacuum system of the 7 bev. proton synchrotron. Prib. i tekhn.
eksp. 7 no.4:46-51 JI-Ag '62. (MIRA 16:4)

1. Nauchno-issledovatel'skiy institut elektrofizicheskoy
apparatury Gosudarstvennogo komiteta po ispol'zovaniyu
atomnoy energii SSSR.
(Vacuum apparatus) (Synchrotron)

KARPENKO, N.P.; KUSLIK, M.I., professor, zaveduyushchiy.

Knock knee (genu valgum). Vest.khir. 73 no.5:12-17 S-O '53. (MLRA 6:11)

1. Kafedra ortopedii i protezirovaniya Gosudarstvennogo ordena Lenina Lenin-gradskogo instituta usovershenstvovaniya vrachey im. S.M.Kirova (for Kuslik).
2. Ortopedicheskoye otdeleniye Tsentral'nogo gosudarstvennogo travmatologicheskogo instituta im. R.R.Vredena. (Leg--Abnormities and deformities)

KARPENKO, N.P., kandidat meditsinskikh nauk (Leningrad ul. Plutalova d.5 kv.38)

Dislocations in childred. Vest.khir.74 no.7:46-50 O-N '54.
(MLRA 8:10)

1. Iz Gosudarstvennogo nauchno-issledovatel'skogo detskogo
ortopedicheskogo instituta im. G.I.Turnera.
(DISLOCATIONS, in infant and child)

KARPENKO N.P.

KARPENKO, N.P. (Leningrad)

Use of a metal folding rule for anthropometric examinations.

Ortop.travm. i protez. no.2:65-66 Mr-Ap '55 (MLRA 8:10)

(ANTHROPOMETRY

use of metal folding rule)

KARPENKO, N.P., kand.med.nauk

Objective examination of the curvature of the spine and trunk;
measurement by a transparent comparative millimetric grid.

Ortop.travm. i protez. 20 no.7:55-57 J1 '59. (MIRA 12:10)

1. Iz Stalinskogo nauchno-issledovatel'skogo instituta travmato-
logii, ortopedii i protezirovaniya (dir. - kand.med.nauk T.A.
Revenko).

(ORTHOPEDICS equipment & supplies)

(SCOLIOSIS diag.)

KARPENKO, N.P.

Surgical treatment of a deformity of the spine. Vest. khir. 85
no. 8:132-133 Ag '60. (MIRA 14:1)
(PHLEGMON) (SPINE—SURGERY)

KARPENKO, N.P. (Leningrad, Barmaleyeva ul., d.5, kv.38)

Treatment of fractures of long tubular bones with the author's
own apparatus. Vest.khir. no.4:126-129 '61. (MIRA 14:4)

1. Iz travmatologicheskogo otdeleniya (nauchn. rukovod. - prof.
G.Ya. Epshteyn) bol'nitsy im. Raukhfusa (gl. vrach - Yu.S.
Chistyakova).

(FRACTURES)

KARPENKO, N. V.

KARPENKO, N. V. -- "Investigation of the Laws of Movement and Precipitation of Granules in Locks with Low Water Levels." Min Higher Education USSR. Leningrad Order of Lenin and Order of Labor Red Banner Mining Inst. Leningrad, 1955. (Dissertation for the Degree of Candidate of Technical Sciences.)

SO: Knizhnaya letopis', No. 4, Moscow, 1956

ANDREYEVA, Ye.V.; KARPENKO, N.V.

Forecasting the runoff of spring floods in western Kazakhstan,
as exemplified by the Uil River. Trudy Kaz.NIGMI no.16:3-19 '61.
(Uil River--Flood forecasting) (MIRA 15:5)

KARPENKO, N.V.

Enlarged plenum of the Scientific Technological Council of the
Scientific Research and Planning Institute for the Mechanical
Processing of Minerals on the improvement of flotation machines.
TSvet. met. 34 no. 4:75-78 Ap '61. (MIRA 14:4)
(Flotation--Congresses)

KARPENKO, N.V.

Forecasting the extent of high waters and maximum discharge of the
water of the Dzhaksy-Sarysu and Sarysu Rivers. Trudy KazNIGMI
no.18:113-119 '63. (MIRA 17:4)

AKININ, P. I., inzh.; BUGAYEV, A. B., inzh.; GAZIN, V. V., inzh.;
GINDIS, Ya. P., inzh.; ZAYTSEV, V. V., inzh.; KARPENKO, V. M.,
inzh.

Automatic control of ladle turning. Mekh.i avtom.proizv.18
no. 5:14-16 My '64. (MIRA 17:5)

S/598/61/000/006/009/034
D228/D303

AUTHORS: Ogurtsov, S.V., Reznichenko, V.A., Karpenko, O.A.,
and Yegorov, S.I.

TITLE: The two-stage method of the sodiothermic preparation
of titanium

SOURCE: Akademiya nauk SSSR. Institut metallurgii. Titan i
yego splavy. no. 6, 1961. Metallogermiya i elektro-
khimiya titana, 60 - 67

TEXT: In re-examining the two-stage method for the sodiothermic
production of Ti the authors' aim was to secure information on the
optimum temperature conditions for the formation of "black salt"-
 $13\text{NaCl} \cdot 3\text{TiCl}_3 \cdot 2\text{TiCl}_2$; the distribution of the reaction products du-
ring the prereduction of this compound; the influence of both the
rate of Na input and the excess of NaCl on the crystallization of
Ti; and the main structure of the resulting metal. "Black salt"
crystallizes in one of the lower systems, and has a refractive-in-
dex and melting-point of 1.66 - 1.68 and 502 - 503° respectively;
Card 1/3

The two-stage method of the ...

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D228/D303

it arises as an intermediate product in the first stage of the so-
diathermic process and eliminates the formation of finely-dispersed
Ti -- a possible source of metal contamination. The work was done
in a laboratory reactor fitted with a distillation crucible and a
feeder for the liquid reducing-agent which was added either rapid-
ly (in 1 or 2 portions) or slowly in small successive increments.
The experimental data show that a homogeneous crystalline mass of
"black salt" may be obtained in all cases, particularly at 750 -
850°. The simultaneous addition of all ~~reagents~~ gives a fine sponge.
But coarser dendritic material -- with crystal dimensions of up to
25 mm and having the properties of "iodide" Ti ($H_B = 90$) ~~is~~ is for-
med on the addition of liquid Na to molten "black salt" at 650 -
750°. The slow rather than the rapid addition of Na also promotes
the growth of coarser Ti. Structures identified by the authors in-
clude compact sponge consisting of a homogeneous mass of small
grains, dendritic material, and acicular material with discrete Ti
crystals whose size is increased by decreasing the rate of the re-
ducer's input. However, in the event of an excess of NaCl over the
amount required for the formation of "black salt", the rapid addi-
Card 2/3

The two-stage method of the ...

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tion of the reducer is conducive to the development of large crystals. The author conclude that the further elaboration of this method could lead to both the decreased consumption of Na and Cl in the sodiothermic process and the considerable improvement of the quality of the end-product. There are 4 figures.

Card 3/3

GOROSHCHENKO, Ya.G.; UDE, E.O.; KARPENKO, O.A.

Chlorination of sphene concentrates by chlorine gas without a reducing agent. Titan i ego splavy no.9:123-126 '63. (MIRA 16:9)
(Titanium ores) (Chlorination)

~~CONFIDENTIAL~~ Ya.G.; UDE, E.O.; KARPENKO, O.A.

Chlorination of sphene concentrates by chlorine gas with a reducing agent. Titan i ego splavy no.9:127-135 '63. (MIRA 16:9)
(Titanium ores) (Chlorination)

VOLOSHIN, A.M. (Krivoy Rog); KARPENKO, O.A. (Krivoy Rog)

Using short-delay blasting at the "Kommunar-Pobeda" mine of the
Dzerzhinskii Mining Administration. Met. i gornorud. prom. no.3:
75-76 My-Je '63. (MIRA 17:1)

AGOSHKOV, M.I.; KARPENKO, O.M.

Discussion of principles governing the planning of scientific
research. Vest. AN SSSR 35 no.5:81-85 My '65.

(MIRA 18:6)

1. Chlen-korrespondent AN SSSR (for Agoshkov).

L 1301-66 EWT(d)/EWT(1)/EWT(m)/EWP(w)/T-2/EWP(1) IJP(c) WH/EM/EG
 ACCESSION NR: AP5022453 UR/0209/65/000/009/0019/0023

AUTHORS: Grukhn, N. (Engineer, Captain); Karpenko, V. (Engineer, Major);
 Shirokov, B. (Engineer, Lieutenant Colonel)

TITLE: In bumpy air conditions

SOURCE: Aviatsiya i kosmonavtika, no. 9, 1965, 19-23

TOPIC TAGS: aircraft stress, aircraft control, aircraft control system, atmospheric turbulence, automatic pilot, aircraft stability, gust load

ABSTRACT: The control problems involved in flying through bumpy air were studied to determine the best control system. Structural overloading (caused by the wind) and maneuvering stress components must be minimized, and angles of attack exceeding the critical one must be avoided. Manual control causes up to 50% more overloading situations than autopilot control, since the plane's moment of inertia prevents the pilot from rapidly changing the pitch angle. An autopilot can react to pitch angle, angular acceleration, and altitude or may be insensitive to altitude. Small altitude changes produce insignificant control signals, and large altitude changes result in control with increased maneuvering overloading. Thus, in all conditions (except for gale gusts which must be studied further) the

Card 1/2

Card 2/2

OVNATANYAN, K.T., prof., zasluzhennyy deyatel' nauki UkrSSR; KARPENKO,
V.S., dotsent

Clinical aspects, diagnosis and treatment of cysts and tumors of
the tail portion of the pancreas. Vest. khir. 94 no.1:14-17 Ja '65.
(MIRA 18:7)

1. Iz fakul'tetskoy khirurgicheskoy kliniki (zav. - prof. K.T.
Ovnatanyan) lechebnogo fakul'teta Donetskogo meditsinskogo instituta
imeni Gor'kogo.

KARPENKO, O.Yu.

Library of the Academy of Sciences of the Ukrainian S.S.R. in Lvov.
Visnyk AN URSR 24 no.11:79-80 N '52. (MLRA 9:9)
(Lvov--Librairies).

KARPENKO, O.Yu.

Soviet government in the Western Ukraine in 1920. Visnyk AN
UESR 26 no.11:8-14 N '55. (MLRA 9:2)
(Ukraine--Revolution, 1917-1921)

KARPENKO, O. YU.

USSR/Miscellaneous - Politics

Card 1/1 : Pub. 138 - 6/11

Authors : Karpenko, O. Yu.

Title : From the history of revolution. Struggle of West Ukrainian labor masses for the Communist regime

Periodical : Visnik AN URSR, 8, 51-60, Aug 1954

Abstract : Fragments from the October 1917 uprising of labor masses in Western Ukraine (Drohobycz Petroleum Region, former Poland) against the Austro-Hungarian regime. Remarks by Lenin and Stalin regarding this unsuccessful revolution, are included.

Institution : ...

Submitted : ...

KARPENKO, P.

Reliable spark extinguishers for tractors and combines. Pozh. delo
4 no.1:16 Ja '58. (MIRA 11:1)

1. Nachal'nik otдела tekhnicheskogo kontrolya Dzhambul'skogo remont-
nogo zavoda.

(Dzhambul Province--Tractors--Safety appliances)

ZALOGIN, Nikolay Savel'yevich [Zalohin, M.S.]; KARPENKO, P., red.;
GUSAROV, K. [Husarov, K.], tekhn.red.

[Examination problems in mathematics] Konkursni zadachi z
matematyky. Kyiv, Derzh.vyd-vo tekhn.lit-ry URSR, 1959.
436 p. (MIRA 13:8)
(Mathematics--Problems, exercises, etc.)

KARPENKO, P.D.

Determining the distribution of pressure on the profile during
the flow of an incompressible fluid around it. Dop. AN URSR
no.12:1560-1566 '61. (MIRA 16:11)

1. Drogobichskiy gosudarstvennyy pedagogicheskiy institut.
Predstavleno akademikom AN UkrSSR G.N.Savinym [Savin, H.M.].

L 21765-65 EWP(m)/EWG(v)/EWA(h)/EWP(k)/EWT(d)/EWT(l)/EWT(m)/FCS(k)/FS(m)/T-2/
EWA(d)/EWA(l)/EWP(w)/EWP(v) Pd-1/Pe-5/Pf-4/PeB SSD/AEDC(a)/AFWL/ASD(f)-3
EM

ACCESSION NR: AT5002839

S/3123/64/000/001/0035/0044

AUTHOR: Karpenko, P. D.

TITLE: Incompressible flow around an arbitrary wing profile 29 P+1

SOURCE: AN UkrSSR, Institut matematiki, Voprosy matematicheskoy fiziki i teorii funktsiy, no. 1, 1964, 35-44

TOPIC TAGS: incompressible flow, arbitrary wing profile, flow around wing profile, successive conformal mapping 26

ABSTRACT: The problem of determining the transformation function which conformally maps a region of incompressible fluid flow around an arbitrary wing profile onto the exterior of a circle is analyzed. The numerical solution of this problem by using the method of successive conformal mappings developed by P. F. Fil'chakov (Ukrainskiy matematicheskii zhurnal, v. 10, no. 4, 1958) is proposed. A procedure is presented for conformal mapping of a wing profile into a curve which is close to the unit circle, then mapping into the unit circle. Peculiarities of such mappings are analyzed and transformation functions are given. The author claims that the advantage of this method rests

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L 21765-65

ACCESSION NR: AT5002839

in the fact that all transformations are carried out by means of elementary functions which can be calculated easily on simple digital computers. Besides, this method does not require knowing the equation of the wing profile — it is sufficient to know a certain number of its points. In addition, the article analyzes the problem of determining the lifting force of the wing, which is reduced to the problem of determining the circulation velocity of a flow past the wing profile. It is shown how the first three coefficients of transformation, functions expanded into Laurent series which are necessary for the solution of the problem, can be determined to any desired accuracy. The circulation velocity of the flow and the lifting force are determined from the obtained value of the first coefficient. A concrete example is analyzed to illustrate the method. Orig. art. has: 5 figures and 32 formulas. [LK]

ASSOCIATION: none

SUBMITTED: 00

ENCL: 00

SUB CODE: AS, ME

NO REF SOV: 006

OTHER: 000

ATD PRESS: 3168

Card 2/2

ACCESSION NR: AP4012584

S/0021/64/000/002/0177/0180

AUTHOR: Karpenko, P. D.

TITLE: A numerical method of mapping a polygon on a circle

SOURCE: AN UkrRSR. Dopovidi, no. 2, 1964, 177-180

TOPIC TAGS: tracking, tracing, aerostuctures, conformal mapping, aircraft wing

ABSTRACT: An approximate method of mapping a polygon on a circle and of determining the constants of the Christoffel-Schwartz integral by the method of successive conformal mapping (P. F. Fy'l'chakov, Ukrayins'ky'y Matematychnyy Zhurnal, v. 10, 1958, 340) is considered. The mapping of the outer region of a broken line (a degenerate tetragon) on the outside of a circle is considered as a numerical example in connection with calculations that can be applied in designing an aircraft wing. Orig. art. has 2 figures, 1 table, and 11 formulas.

ASSOCIATION: Drogobyts'ky'y Derzhavny'y Pedagogichny'y Insty*tut (Drogobitsy State Pedagogic Institute)

Card 1/71

27 June 63

10.12.10

21366
S/021/61/000/012/003/011
D251/D305

AUTHOR: Karpenko, P. D.

TITLE: Determining the pressure distribution on a profile
with a flow of incompressible liquid

PERIODICAL: Akademiya nauk Ukrayins'koyi RSR. Dopovidi, no. 12,
1961, 1560-1566

TEXT: It is assumed that a profile is given with an angular point
in its rear edge. The Karman-Trefetz function is applied

$$\frac{z' - \kappa q}{z' + \kappa q} = \frac{(\zeta' - q)^x}{(\zeta + q)^x} \quad (1)$$

where $\kappa = 2 - \frac{\delta}{\pi}$ and δ is the angle between the tangents in angular
strip, and q is given approximately by

$$c \approx 2\kappa q = \sqrt{A'B'} \quad (2)$$

Card 1/5

21366
S/021/61/000/012/003/011
D251/D305

Determining the pressure ...

(See also figure at end.) By means of a conformal transformation

$$z' = z - \alpha q; \quad \zeta' = \zeta - q \quad (3)$$

(1) is mapped onto a quasi circle K' in the ζ -plane. K' is then surrounded by a circle K , such that at B (the transform of the angular point B') there is a minimum divergence between K and K' . The center of K , $M(\xi_0, \eta_0)$ is found by the method of least squares.

By means of the transformation

$$r = \frac{\theta}{\psi} \quad (10)$$

K' is mapped onto K , the angles being as shown. If

$$w = \frac{a}{1 - \left(1 - \frac{a}{I}\right)^{\delta}} \quad (9)$$

Card 2/5

Determining the pressure ...

21366
S/021/61/000/012/003/011
D251/D305

where α is the angle of attack, and

$$w_1 = w + \xi_0 + i\eta_0 \quad (14)$$

then, for a definite solution, it is necessary to evaluate $\left| \frac{dw_1}{dz} \right|$.
Writing, in the usual way,

$$\left| \frac{dw_1}{dz} \right| = \left| \frac{dw_1}{dw} \right| \left| \frac{dw}{d\xi} \right| \left| \frac{d\xi}{dz} \right| \quad (19)$$

it is shown that $\left| \frac{dw_1}{dz} \right| = 1$, and

$$\frac{d\xi}{dz} = \frac{(2q)^{\frac{1}{2}} \left(1 - \frac{2zq}{z} \right)^{\frac{1}{2}}}{\left[1 - \left(1 - \frac{2zq}{z} \right)^{\frac{1}{2}} \right]^{\frac{1}{2}}} \cdot \frac{1}{1 - \frac{2zq}{z}} \cdot \frac{1}{z^{\frac{1}{2}}} \quad (20)$$

Card 3/5

Determining the pressure ...

S/021/61/000/012/003/011
D251/D305

$$\left| \frac{dw}{dz} \right| = \frac{\xi^2 + \eta^2}{x^2 + y^2} \cdot \frac{1}{b} \quad (21)$$

where

$$\rho = \sqrt{\frac{(\xi - a)^2 + \eta^2}{\xi^2 + \eta^2}}$$

In conclusion, the pressure distribution on the profile RAD-38-12.66 is calculated by this method, using a computer. The results obtained are compared in tabular form with the experimental data of Ye. Karafoli (Ref. 4: Aerodinamika kryla samoleta (Aerodynamics of an Aircraft Wing), M. 1956). There are 1 figure, 2 tables and 5 Soviet-bloc references.

Card 4/ 5

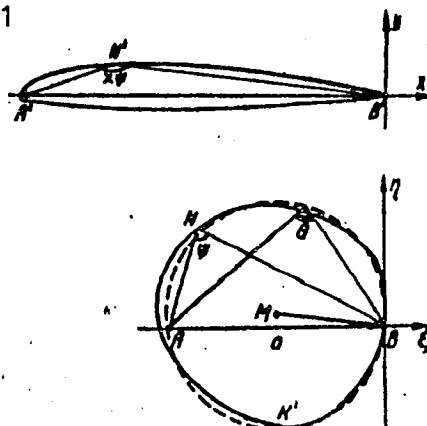
Determining the pressure ...

S/021/61/000/012/003/011
D251/D305

ASSOCIATION: Drohobys'tkyy derzhavnyy pedahohichnyy instytut
(State Pedagogic Institute of Drohobych)

PRESENTED: by H. M. Savin, Academician AS UkrSSR

SUBMITTED: March 10, 1961



Card 5/5

KARPENKO, P.D.

Numerical method of mapping a polygon on a circle. Dop. AN URSR no.
2:177-180 '64. (MIRA 17:6)

1. Drogobychskiy gosudarstvennyy pedagogicheskiy institut. Pred-
stavleno akademikom AN UkrSSR Yu.A.Mitropol'skim [Mytropol's'kyi,
IU.O.].

KARPENKO, P.D. (Drogoibich)

Conformal representation of the appearance of a disk with a hole
in it and the application of this representation to the problems
of flow about given regions. Prikl. mekh. 10 no. 2: 198-201, 1963.
(MIRA 1787)

1. Drogoibichskiy gosudarstvennyy pedagogicheskiy institut.

KARPENKO, P.G. (stantsiya Konobeyevo Moskovskoy oblasti)

Setup for demonstration of the speed of electrochemical corrosion of
clean metal in contact with another metal. Khim. v shkole 13 no.5:56
S-0 '58. (MIRA 11:9)

(Electrolytic corrosion)

KARPENKO, P.I., inzh.

Improved fastening of the barrel of the EP screw press. Masl.-zhir.
prom. 24 no.10:37-38 '58. (MIRA 11:10)

1. Severakiy gosmaslozavod.
(Power presses)

KARPENKO, P. M.

AID P - 3229

Subject : USSR/Electricity

Card 1/1 Pub. 29 - 14/30

Authors : Sayapin, N. I., and P. M. Karpenko, Foremen

Title : Production of tubular manometric springs

Periodical : Energetik, 8, 14-15, Ag 1955

Abstract : At one of the hydroelectric power stations, 30- and 100-at manometric springs were produced according to the authors' designs. The authors describe the production procedure. Four drawings.

Institution : None

Submitted : No date

AKHMEDBABAYEV, M.Kh.; ARIFDZHANOV, K.A.; BELOUSOV, N.A.; BELYAKOV, S.P.;
ZOTOV, V.G.; ISAYEVA, Z.D.; MAKHMUDOV, I.A.; ISHCHENKO, F.S.;
KRASIL'NIKOV, Ya.A.; NIKOL'SKIY, I.P.; NETSETSKIY, A.M.;
PERGAT, F.F.; PAVLOVSKAYA, M.D.; SAMSONOV, L.S.; POLIZHAYEV,
A.I.; SMIRNOV, F.Ye.; SABININ, M.N.; SHUTYAYEV, N.A.; CHIZHIK,
V.I.; KARPENKO, P.M.; IMEROV, A.I.

Mikhail Aleksandrovich Nenetskii; obituary. Veterinariia 37
no.10:94 0 '60. (MIRA 15:4)
(Nenetskii, Mikhail Aleksandrovich, 1899-1960)

BOKSER, O.Ya; KARPENKO, P.N.

Method of investigation of speech reactions. Zhur. nevr. i psikh. 54
no.12:1024-1028 D '54. (MIRA 8:2)

(SPEECH,

appar. for investigation of speech reactions in higher
nervous funct. tests)

(CENTRAL NERVOUS SYSTEM, function tests,

higher nervous funct. tests with appar. for investigation
of speech reactions)

KARPENKO, P.T., brigadir puti (Stantsiya Olegovo, Yugo-Vostochnoy dorogi.)

Always in excellent condition. Put' i put.khoz. 5 no.10:9 0 '61.
(MIRA 14:10)

(Railroads--Track)

NAUMOV, I. V.

NAUMOV, I. V. -- "MAGNETIC AMPLIFIER IN A DOUBLE CONTACT ENERGY SYSTEM." SUB
30 DEC 52, MOSCOW ORDER OF LENIN POWER ENGINEERING INST. (MOMI V. N. POLYOTV
(DISSERTATION FOR THE DEGREE OF CANDIDATE IN TECHNICAL SCIENCES)

OF: VERKHNAYA MOSKVA, JANUARY-DECEMBER 1952

KARPENKO, P.V., kandidat tekhnicheskikh nauk

Binary magnetic trigger. Trudy MEI no.14:63-72 '53. (MLRA P:7)
(Electric circuits) (Electric relays)

KARPENKO, P. V.

P. V. Karpenko, Semenovodstvo sakharney svely (Sugar-Beet Seed Growing) Sel'
khodoviz, 14 sheets, 1953.

A booklet on sugar beet selection and seed growing, treating the biological (vital) peculiarities and structure of plants during the first and second years of growth, the technical agronomy of beets and transplantation, the storage of seeds and seed roots.

The booklet is intended for agricultural supervisory workers and specialists, directors and agronomists of beet sovkhozes and machine-tractor stations.

SO: U-6472, 18 Nov 1954

KARPENKO, Pavel Vasil'yevich

[Growing sugar beets] Sveklovodstvo. 2., perer. izd. Dopushcheno v kachestve uchebnogo posobiya dlya agronomicheskikh fakul'tetov sel'khoz.in-tov. Moskva, Gos.izd-vo sel'khoz.lit-ry, 1958. 314 p. (MIRA 12:6)

(Sugar beets)

USSR / Cultivated Plants. Plants for Technical Use. M
Oil Plants. Sugar Plants.

Abs Jour : Ref Zhur - Biologiya, No 6, 1959, No. 25004

Author : Karpenko, P. V.
Inst : Voronezh Agricultural Institute
Title : Forty Years of Labor with the Sugar Beet

Orig Pub : Zap. Voronezhsk. s.-kh. in-ta, 1958, 28,
No 1, 37-38

Abstract : No abstract given

Card 1/1

KARPENKO, P.V.

Means of increasing the yield of sugar-beet seeds. Sakh.prom. 34
no.5:62-66 My '60. (MIRA 14:5)

1. Voronezhskiy sel'skokhozyaystvennyy institut.
(Sugar beets)

KARPENKO, P.V.; YAKIMENKO, I.Ya.; GONCHAROV, G.A.

Mechanization of labor-consuming processes involved in
the growing of sugar-beet seeds. Sakh.prom. 34 no.8:
58-59 Ag '60. (MIRA 13:8)

1. Voronezhskiy sel'skokhozyaystvennyy institut (for
Karpenko, Yakimenko). 2. Mikhaylovskiy sveklosovkhoz
(for Goncharov).
(Sugar beets)

KARPENKO, E.

Alarm? It is a drill... Pozh.delo 7 no.9:20 S '61.

(MIRA 14:11)

1. Nachal'nik pozharney komandy, Kamyzyan, Astrakhanskoy oblasti.
(Astrakhan Province--Fire departments)

PAVLOV, A.I., kand.tekhn. nauk, dotsent; ~~KARPENKO, R.A., inzh.~~

Hungarian apparatus for testing textiles. Izv. vys. ucheb.
zav.; tekhn. log. prom. no.2:138-144 '60. (MIRA 13:11)

1. Kiyevskiy tekhnologicheskiy institut legkoy promshlennosti.
(Hungary--Textile industry--Equipment and supplies)
(Textile fabrics--Testing)

KARPENKO, R.A., inzh.

Instrument for determining the yarn length of a loop in knit goods.
Izv.vys.ucheb.zav.; tekhn.prom. no.4:157-160 '60. (MIRA 13:10)

1. Kiyevskiy tekhnologicheskoy institut legkoy promyshlennosti.
(Knitting machinery) (Hungary--Measuring instruments)

BOBROVA, A.M.; SOKOLOVA, L.A.; KARPENKO, R.N.

Coagulation of black slimes in the manufacture of titanium
dioxide pigment. Lakokras.mat.i ikh prim. no.3:45-47 '62.
(MIRA 15:7)

(Titanium dioxide)
(Surface-active agents)

KARPENKO, S.

Cotton Growing - Ukraine

Cultivation of cotton by the foremost machine-tractor stations of the Ukraine.
Khlopkovodstvo no. 4, 1952

Monthly List of Russian Accessions, Library of Congress, August 1952. Unclassified.

KARPENKOV, S.

Voluntary inspection finds fresh power. Avt.transp. 41 no.10:
7-8 0 '63. (MIRA 16:10)

YAKIMUK, P.G., inzhener-mekhanik; VASILYUK, N.F.; GAL'PERIN, L.Yu.;
ZAYTSEV, T.F.; KARPEN'KO, S.A.; STEPANENKO, A.N.; YAVORSKIY, A.A.;
SHAGOMYALO, V.I., redaktor; GURZHIY, M.Ye., tekhnicheskiiy redaktor

[Tractor operator's manual] Spravochnik traktorista. Izd. 4-oe, perer. i dop. Kiev, Gos. izd-vo selkhoz. lit-ry USSR, 1955. 519 p. (Tractors--Handbooks, manuals, etc) (MIRA 9:1)

KARPE I.K., S.A.

ZAYTSEV, T.F.; ~~KARPENKO, S.A.~~; NESVITSKIY, Ya.I., kandidat tekhnicheskoy
nauk; STEPANENKO, A.N.; YAVORSKIY, A.A.; SHAGOMYALO, V.I.,
redaktor; KRAVCHENKO, M.F., tekhnicheskoy redaktor

[Tractor brigade leader's manual] Spravochnik brigadira
traktornoj brigady. Izd. 2-oe, dop. Kiev, Gos. izd-vo sel'khoz.
lit-ry USSR, 1956. 48 p. (MLRA 10:4)
(Tractors)

KARPENKO, S.A., inzh.

Developments in welding procedures in White Russia. Svar.
proizv. no.7:33 JI '61. (MIRA 14:6)

1. Belorusskiy sovnarkhoz.
(White Russia--Welding)

TKACHENKO, Aleksey Yefimovich; KARPENKO, Sergey Aleksandrovich;
VORONEZHSKIY, V.I., inzh., retsenzent; PILIPENKO, Yu.P.,
inzh., red.; GORNOSTAYPOL'SKAYA, M.S., tekhn. red.

[Machines for the over-all mechanization of field crop cultivation] Mashiny dlia kompleksnoi mekhanizatsii rabot v polevod-
stve. Moskva, Gos. nauchno-tekhn.izd-vo mashinostroit. lit-ry,
1961. 128 p. (MIRA 15:2)

(Farm mechanization)

KARPENKO, S.O., inzh.

Structural features of the SK-4 combine. Mekh.sil!.hosp. 12
no. 6:29-30 Je '61. (MIRA 14:5)
(Combines (Agricultural machinery))

KOVTUN, I.G. [Kovtun, I.H.], kand.ekonom.nauk; KARPENKO, S.^fO., inzh.

Determining the economic effectiveness of new machinery. Mekh.
sil'.hosp. 12 no.8:19-21 Ag '61. (MIRA 14:7)
(Agricultural machinery)

KARPENKO, S. E., Dir.
Dir. of the Dept. of Parasitology, Odessa Oblast vet. Bact. Lab.
"Illness of horses with rhinoestrosis?"
SO: Vet. Zh(3) 1947, p 42

TUGARINOV, A.I.; ZYKOV, S.I.; KARPENKO, S.F.

Absolute age of the Saksagan' Plagioclase granites in the Krivoy
Rog Basin. Geokhimiia no.2:245-247 F '65. (MIRA 18:6)

1. Institut geokhimii i analiticheskoy khimii imeni Vernadskogo
AN SSSR, Moskva.

KARPENKO, S.K., inzh.-mekhanik (stantsiya Mozhaysk Kalininskoy dorogi)

Improved frame for a rail-drilling machine. Put' i put.khoz.
no.1:13 Ja '59. (MIRA 12:2)

(Railroads--Rails)

(Drilling and boring machinery)

KARPENKO, S.K., inzh.-mekhanik (stantsiya Mozhaysk Kalininskoy dorogi)

Rack clamp used for repair ties in the track. Put' i put. khoz.
no. 3:22 Mr 159. (MIRA 12:6)

(Railroads--Tools and implements)

(Railroads--Ties--Maintenance and repair)

KARPENKO, S.K., inzh.-mekhanik (st.Mozhaysk, Kalivinskoy dorogi).

Mobile bridge gauge. Put' i put. khoz. no.5:25 My '59.
(MIRA 12:8)

(Railroad bridges) (Gauges)

KARPENKO, S.K., inzh.-mekhanik (stantsiya Mozhaysk, Kalininskaya doroga)

Boring seats in ball bearings. Put' i put. khoz. no.6:28 Je '59.
(MIRA 12:10)

(Drilling and boring) (Ball bearings)

KARPENKO, T.F.; PCHELKIN, Yu.N.

Electric solar fruit drier. Sbor. nauch.-tekh. inform.
po elektr. sel'khoz. no.16/17:66-69 '64.

(MIRA 18:11)

DVORKO, G.F.; KARPENKO, T.F.; SHILOV, Ye.A.

Kinetics and mechanism of hydrogen iodide addition to multiple carbon-carbon bonds in organic solvents. Part 5: Addition of hydrogen iodide to methyl ester of propionic acid in chlorobenzene. *Kin. i kat.* 6 no.5:809-814 S.-O '65.

(MIRA 18:11)

1. Institut organicheskoy khimii AN UkrSSR.

DVORKO, G.F.; KARPENKO, T.F.

Contribution to the theory of nucleophilic additions. Part 13:
Addition of hydrogen iodide to acetylenecarboxylic esters from
mixtures of N-butyl quinolinium iodide and carboxylic acids in
chloroform. Ukr. khim. zhur. 31 no.1:75-83 '65. (MIRA 18:5)

1. Institut organicheskoy khimii AN UkrSSR.

DVORKO, G.F.; KARPENKO, T.F.; MIRONOVA, D.F.; SHILOV, Ye.A.

Contributions to the theory of nucleophilic additions. Part 15:
Nature of the acid as an important factor in the kinetics of
hydrogen iodide addition to dimethyl ester of acrylenedicarboxylic
acid in methanol and methanol - chloroform mixtures. Ukr. khim.
zhur. 31 no. 11:1177-1182 '65 (MIRA 19:1)

1. Institut organicheskoy khimii AN UkrSSR.

MINASYAN, T.S.; SEROV, V.V.; OYSTANNIKOV, P.V.; ZHUKOV, I.S.;
KARPENKO, T.G.

Using cracking residues as material for secondary cracking.

Azerb.neft.khoz. 35 no.4:19-22 Ap '56.

(MLRA 9:10)

(Cracking process)

KARPENKO, T. G.

AUTHORS: Minaev, T.S., Palchikov, G.P., Bolotov, L.T., Ovsyannikov, P.V., Shumakov, V.G., Afanasenko, M.M., Ruskov, A.P. and Karpenev, I.D.
TITLE: Investigations in the Gaseous Phase on the Catalytic Purification of Middle Distillates Obtained During Thermo-Cracking Processes (in opyta raboty Gornushkikh savodov po kataliticheskoj ochistke srednikh distillyatov termicheskogo krakings)
PERIODICAL: Khimiya i tekhnologiya topliv i masel, 1959, Nr 4, pp 44-45 (USSR)

ABSTRACT: The octane numbers of gasolines can be improved by catalytic cracking of the kerosene-gas-oil fractions, obtained during fractional distillation. This, however, seems unsatisfactory because these fractions are high quality starting materials for jet and diesel fuels etc. The middle fractions, obtained during thermal cracking of gasolines, contain a high quantity of unsaturated hydrocarbons and have a low cetane number. The quality of diesel fuels can be improved by using aluminum silicate catalysts and enriched secondary distillates. In this way, the consumption of unsaturated

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compounds is decreased and the cetane number of the diesel fuels increased, whilst maintaining the standards required by GOST for diesel fuels. Tests were carried out on middle fractions obtained after second distillation of the broad fractions and also by using mixtures of these substances and the middle fractions obtained during thermal cracking. The properties of the tested materials are given in table 1 and the process conditions in table 2. Some high octane gasoline was obtained during this process. This was purified, washed and reacted with an 15 to 20% NaOH solution. After stabilisation it was purified again, treated with a 15 to 10% NaOH solution and washed. The stabilised pure gasoline had an octane number of 76. A catalyst of decreased activity (29 to 30) was used during the enriching process. The properties of the aluminum silicate catalysts are given (table 3). Table 4 gives the hydrocarbon composition of the gas. The catalytic cracking of middle fractions can

Card 2/3

be carried out on existing cracking plants and it is pointed out that the deposition of coke does not exceed the allowed limits. There are 4 tables.

Card 3/3

KARPENKO, T. G.

S/021/61/009/021/070/094
B138/B101

AUTHORS: Bolotov, L. T., Shumovskiy, V. G., Ovsyannikov, P. V.,
Pal'chikov, G. F., Minasyan, T. S., Afanasevko, M. M., Rusakov,
A. P., Burlakov, A. G., Karpenko, T. G.

TITLE: Pilot run for the commercial processing of a secondary raw
material on a catalytic cracking unit

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 21, 1961, 401 - 402,
abstract 21M82 ([Tr.] Groznenak. nef. in-t. sb. 23, 1960,
97 - 105)

TEXT: With the aim of increasing supplies of quality high-speed diesel
fuels, experiments have been conducted, in commercial conditions, for the
refining of the medium fractions of the thermal cracking process by re-
distribution of the hydrogen on the aluminosilicate catalyst. The
characteristics of the starting material and of the end product are
enumerated. It is said that it would be possible to use this method for
the production of the components of high-octane automobile gasolines and
low pour-point high-speed diesel fuels. Data are given for the production

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Pilot run for the commercial processing... S/081/61/000/021/070/094
B138/B101

cycle of the plant, and a comprehensive material balance is shown.
[Abstracter's note: Complete translation.]

Card 2/2

KARPENKO, T. N.

GLOTOVA, Ye. V. and KARPENKO, T. N. "The barrier function of the lymphatic glands of rabbits immunized by polyvaccines," Trudy Kirovskogo in-ta epidemiologii i mikrobiologii, Collection 2, 1948, p. 139-43, - Bibliog: p. 143.

SO: U-3736, 21 May '53, (Letopis 'Zhurnal 'nykh Statey, No. 17, 1949)

KARPENKO, T.V.

PHASE I BOOK EXPLOITATION

SOV/6025

Soveshchaniye po ustalosti metallov. 2nd., Moscow, 1960.

Tsiklicheskaya prochnost' metallov; materialy vtorogo soveshchaniya po ustalosti metallov, 24 - 27 maya 1960 g. (Cyclic Metal Strength; Materials of the Second Conference on the Fatigue of Metals, held May 24 - 27, 1960) Moscow, Izd-vo AN SSSR, 1962. 338 p. Errata slip inserted. 2800 copies printed.

Resp. Ed.: I. A. Odintsov, Corresponding Member of the Academy of Sciences of the USSR; Ed. of Publishing House: A. N. Chernov; Tech. Ed.: A. P. Guseva.

PURPOSE: This collection of articles is intended for scientific research workers and metallurgists.

COVERAGE: The collection contains papers presented and discussed at the second conference on fatigue of metals, which was held at the Institute of Metallurgy in May 1960. These papers deal with the nature of fatigue fracture, the mechanism of formation

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Cyclic Metal Strength (Cont.)

SOV/6025

and growth of fatigue cracks, the role of plastic deformation in fatigue fracture, an accelerated method of determining fatigue strength, the plotting of fatigue diagrams, and various fatigue test methods. New data are presented on the sensitivity of high-strength steel to stress concentration, the effect of stress concentration on the criterion of fatigue failure, the effect of the size factor on the strength of metal under cyclic loads, and results of endurance tests of various machine parts. Problems connected with cyclic metal toughness, internal friction, and the effect of corrosion media and temperature on the fatigue strength of metals are also discussed. No personalities are mentioned. Each article is accompanied by references, mostly Soviet.

TABLE OF CONTENTS:

NATURE OF FATIGUE FRACTURE

Oding, I. A. Diffusionless Mechanism of Formation and Growth of a Fatigue Crack
Card 2/9

3

2

Cyclic Metal Strength (Cont.)

SOV/6025

Postnikov, V. S., I. V. Zolotukhin, and G. A. Gorshkov,
Investigation of Mechanical and Thermal Fatigue of Metals
by the Method of Internal Friction 218

Pochtenny, Ye. K. Heat Effect in Cyclic Symmetric Loading
of Parts 227

EFFECT OF ENVIRONMENT
ON THE FATIGUE STRENGTH

Karpenko, T. V. Basic Factors in the Investigation of the
Effect of Environment on Fatigue Strength 233

Bykov, V. A., and G. N. Vsevolodov. Corrosion-Fatigue
Strength of Cast Brass 238

Chayevskiy, M. I. Effect of Melts of Low-Melting
Metals on the Fatigue Strength of Carbon and Chromium-
Nickel Steels 243

Card 7/9

S/137/62/000/012/030/085
A006/A101

AUTHOR: Karpenko, T. V.

TITLE: Basic factors in investigations of the effect of external media upon fatigue strength

PERIODICAL: Referativnyy zhurnal, Metallurgiya, no. 12, 1962, 49, abstract 12I293 (In collection: "Tsiklich. prochnost' metallov", Moscow, AN SSSR, 1962, 233 - 237)

TEXT: An analysis is made of literature data on the effect of various external media upon the fatigue strength of metals and mechanisms of interaction of these media with the metal.

P. Zubarev

[Abstracter's note: Complete translation]

Card 1/1

KARPENKO, T.Ye.

Giant myoma of the ligamentum teres uteri. Akush. i gin.
34 no.5:114-115 S-O '58 (MIRA 11:10)

1. Iz akushersko-ginekologicheskoy kliniki (zav.-prof. Ya.G.
Bukhanov) na baze Stalingradskoy oblastnoy klinicheskoy bol'nitsy
(glavnyy vrach A.O. Gusev).
(UTERUS--TUMORS)

ACC NR: AN7002252

SOURCE CODE: UR/9014/67/000/018/0004/0004

AUTHOR: Karpenko, V. (Special correspondent of Pravda Vostoka); Tatur, S. (Special correspondent of Pravda Vostoka)

ORG: none

TITLE: Studies of Antarctica

SOURCE: Pravda vostoka, no. 18, 21 Jan 67, p. 4, cols. 5-6

TOPIC TAGS: geophysic expedition, meteorologic expedition

ABSTRACT: The 12th Soviet antarctic expedition is on its way to Antarctica. The last group, made up of 73 people; is headed by G. I. Mel'nichuk, a meteorologist, who was with the station "Severnnyy polyus-3." He said that Antarctica is a free territory, open for scientists of all countries. Any military activity there is forbidden by international law. At present, there are four stationary stations on that continent: Miznyy; Molodezhnaya; Vostok; and Novo-Lazarevskaya. Because of the snow, the main base is being transferred from Mirnyy to Molodezhnaya. The most difficult station is still Vostok, which is 3400m above sea level. People working there say that it is not only necessary to work slowly, but also to think slowly. Incidentally, it is there that the world's lowest temperature of minus 87° was recorded. As regards the observations, they will be meteorological, geophysical (Earth magnetism, ionosphere, propagation of radiowaves), glaciological (study of the

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ACC NR: AN7002252

ice cover of the continent), and geological. For the first time, there will be some important medical research. Scientists are interested in the influence of Antarctica on the life activity and psychology of man. This year the Arctic and Antarctic Institute will publish the second volume of the Antarctica Atlas. This expedition, as was the last, is being organized by the Administration of the Hydro-meteorological Service of the USSR. The head of the Novo-Lazarevskaya station O. K. Sedov, Candidate of Geophysic Sciences, said that the station will have 14 people, including meteorologists, aerologists, mechanics, doctors, and a microbiologist (R. Tashpulatov). Meteorologist G. A. Khlopushin, a veteran of 30 years experience, then described some of his past achievements. [NC]

SUB CODE: 08/ SUBM DATE: none/ ATD PRESS: 5110

Card 2/2

PLOTKIN, S., inzh.; KARPENKO, V., inzh.

Manufacture of large brick blocks for walls. Bud. mat. i konstr.
4 no.3:30-34 My-Je '62. (MIRA 15:5)
(Brick walls)